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(54) Title: ELECTRO-OPTICAL LIGHT MODULATION ELEMENT, ELECTRO-OPTICAL DISPLAY AND MODULATION MEDIUM

(57) Abstract: The present invention relates to an electro-optical light modulation element, to electro-optical displays and display systems containing elements of this type, such as, for example, television screens and computer monitors, and to the modulation media used. The light modulation elements according to the invention contain a mesogenic modulation medium which is in an optically isotropic phase during operation of the light modulation elements and, besides good contrast, low viewing-angle dependence and very short response times, are particularly distinguished by relatively low driving voltages. The modulation media according to the invention are distinguished by a combination of large dielectric susceptibility in the optically isotropic phase with small enthalpy of clearing or the occurrence of a blue phase. At a temperature of 4° above the clearing point or conversion temperature (T(N*,BP)), the dielectric susceptibility of the modulation medium is preferably 25 or more and the enthalpy of clearing is 1.50J/g or less.